

REMARKS

With the present amendment, claims 1-24 and 26 are pending. Claims 1-14 have been withdrawn in response to an earlier Restriction Requirement. Claims 25 and 26 have been canceled and new claim 27 has been added.

In a telephone conversation with the Examiner on September 19, 2005, it was clarified that in paragraph 12 of the Office Action dated June 21, 2005, U.S. Patent No. 6,497,893 instead of U.S. Patent No. 6,497,983 was being cited against the present application as set forth below.

Claims 15 and 16 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,727,196 in view of U.S. Patent No. 4,581,254. Claims 15-17 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 of U.S. Patent No. 6,767,508 in view of U.S. Patent No. 4,581,254. Claims 15, 16, and 19-21 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 11-13, 17, and 26 of U.S. Patent No. 6,506,394 in view of U.S. Patent No. 4,581,254. Claims 15, 16, and 19-21 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 and 11 of U.S. Patent No. 6,503,524 in view of U.S. Patent No. 4,581,254. Claims 15, 16, and 19-21 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,626,961 in view of U.S. Patent No. 4,581,254. Claims 15, 16, 19, and 21 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable

over claims 1-3, 8, 11, and 24 of U.S. Patent No. 6,497,893 in view of U.S. Patent No. 4,581,254. Claims 15, 16, 19, and 21 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 9, 10, and 14-17 of U.S. Patent No. 6,017,832 in view of U.S. Patent No. 4,581,254. Claims 15 and 16 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 5,814,567 in view of U.S. Patent No. 4,581,254. Claims 15-17 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 31-33 and 41 of copending Application Serial No. 10/187,653.

Claims 15-17, 19, and 21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Cunningham et al (U.S. Patent No. 4,581,254). Claims 15-17 and 25-26 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Snider et al. (U.S. Patent No. 4,411,949). Claims 18, 20, and 22-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cunningham et al (U.S. Patent No. 4,581,254).

Without commenting on the propriety of the judicially created obviousness-type double patenting rejections, Applicants respectfully submit that independent claim 15 has been amended in a manner that renders these rejections moot. Further, Applicants respectfully submit that independent claim 15 patentably defines over the cited prior art of record for at least the reasons set forth herein.

Independent claim 15 calls for a method of treating a porous substrate. The method includes providing a porous substrate with a first surface and a second surface. The first surface of the porous substrate is contacted with a surfactant or a mixture of

surfactants so that a lesser amount of the surfactant or mixture of surfactants contacts the second surface than contacts the first surface. The porous treated substrate is then dried by directing a gas at the substrate in a direction that is generally from the second surface toward the first surface so that the surfactant or a mixture of surfactants is driven from the second surface toward the first surface. Respectfully, neither Cunningham et al. nor Snider et al. disclose such a method.

Cunningham et al. discloses the use of a foam applicator to apply a foamed treating composition to a paper web or fibrous sheet material. Cunningham et al. does not disclose a drying step directing a gas at the paper web or fibrous sheet material in a direction that is generally from the second surface toward the first surface of the web or fibrous sheet material so that the treating composition is driven from the second surface toward the first surface. Therefore, Cunningham et al. can not anticipate independent claim 15.

Snider et al. discloses applying a cellular foam material to an upper and lower substrate to form a composite structure with a cellular foam core to create building panels which are highly insulating, thermal resistant, low in friability, sound-proof, and self supporting. In creating the building panels, the components of the cellular foam are mixed in a mixing head and are evenly distributed onto the lower substrate. An upper substrate is applied to the cellular foam core as the substrates and core pass through metering rolls. The composite structure of the lower substrate, the upper substrate, and the cellular foam core then pass into an oven, which has vents located in its bottom. The vents allow hot air to enter the oven. A series of conveying rollers used to support and transport the composite structure reside between the vents in the oven and the

composite structure. The heat in the oven causes the cellular foam core of the composite structure to expand and become rigid.

Applicants respectfully submit that Snider et al. does not disclose contacting a first surface of a substrate with surfactants. While the cellular foam core may include surfactants, this foam core as a whole would not be consider a surfactant.

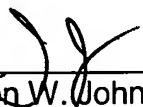
Further, Snider et al. does not disclose drying the porous treated substrate by directing a gas at the substrate in a direction that is generally from the second surface towards the first surface so that the surfactant or mixture of surfactants is driven towards the first surface. In Snider et al., vents in the bottom of the oven allow hot air to circulate within the entire oven, thereby heating the oven. The hot air is not directed from a second surface towards a first surface of the lower substrate material. Rather, the air is pumped into the oven in a myriad of directions from the bottom surface of the oven (as shown in Fig. 1). Also, the oven disclosed in Snider et al. could not direct the hot air from the second surface toward the first surface to drive the surfactant or mixture of surfactants toward the first surface as called for in claim 15 of the present application. The hot air provided by the vents in the oven would be prevented from driving the surfactants or mixture of surfactants in such a manner by the plurality of closely spaced conveying rollers disposed between the lower substrate and the vents within the oven. Therefore, Snider et al. cannot anticipate independent claim 15.

For at least the reasons set forth above, independent claim 15 is patentably distinguishable from the cited prior art and is now allowable. Since claims 16-24, and 27 depend from claim 15, these claims are also allowable. Applicants respectfully submit that the application is now in condition for allowance and favorable action is

requested thereon. The Examiner is encouraged to call the undersigned at his convenience to resolve any remaining issues.

Respectfully submitted,

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